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DATE MAILED: 01/15/2002

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/347,311	07/02/1999	GEERT PLAETINCK	B0192/7010	3674
75	590 01/15/2002			
JOHN R VAN AMSTERDAM C/O WOLF GREENFIELD & SACKS P C FEDERAL RESERVE PLAZA 600 ATLANTIC AVENUE			EXAMINER	
			SORBELLO, ELEANOR	
BOSTON, MA 022102211			ART UNIT	PAPER NUMBER
			1633	~ 21

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
	09/347,311	PLAETINCK ET AL.
Office Action Summary	Examiner	Art Unit
	Eleanor Sorbello	1633
The MAILING DATE of this communication Period for Reply	n appears on the cover sheet wi	th the correspondence address
A SHORTENED STATUTORY PERIOD FOR R THE MAILING DATE OF THIS COMMUNICATION - Extensions of time may be available under the provisions of 37 C after SIX (6) MONTHS from the mailing date of this communication - If the period for reply specified above is less than thirty (30) days, - If NO period for reply is specified above, the maximum statutory properties of the period for reply within the set or extended period for reply will, by - Any reply received by the Office later than three months after the earned patent term adjustment. See 37 CFR 1.704(b). Status	ON. FR 1.136(a). In no event, however, may a report. a reply within the statutory minimum of thirty period will apply and will expire SIX (6) MON.	eply be timely filed y (30) days will be considered timely. THS from the mailing date of this communication.
1) Responsive to communication(s) filed on	21 November 2001 .	
2a)⊠ This action is FINAL . 2b)□		
3) Since this application is in condition for a	Illowance except for formal mat	ters, prosecution as to the merits is
closed in accordance with the practice un Disposition of Claims	nder <i>Εχ paπe Quayle</i> , 1935 C.L	J. 11, 453 O.G. 213.
·	nd 00 in/ore namelia mile the	
4) Claim(s) <u>1-15,17-21,23,24,38-45,47,48 and 1-15,17-21,23,24,38-45,47,48 and 1-15,17-21,23,24,28 and 1-15,17-21,23,24,28 and 1-15,17-21,23,24,28 and 1-15,17-21,28 and 1-15,17-</u>		lication.
4a) Of the above claim(s) is/are with 5) Claim(s) is/are allowed.	ndrawn from consideration.	
	ad 02 in/ore rein the d	
6) Claim(s) <u>1-15,17-21,23,24,38-45,47,48 ar.</u> 7) Claim(s) is/are objected to.	id 92 is/are rejected.	
8) Claim(s) are subject to restriction a	and/or algetica requirement	
Application Papers	mazor election requirement.	
9)☐ The specification is objected to by the Exa	miner	
10) The drawing(s) filed on is/are: a)		ae Evaminor
Applicant may not request that any objection		
11)☐ The proposed drawing correction filed on _		
If approved, corrected drawings are required		
12) The oath or declaration is objected to by the	e Examiner.	
Priority under 35 U.S.C. §§ 119 and 120		
13) Acknowledgment is made of a claim for fo	reign priority under 35 U.S.C. §	5 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:	•	
1. Certified copies of the priority docur	ments have been received.	
2. Certified copies of the priority docur	ments have been received in Ap	oplication No.
 Copies of the certified copies of the application from the Internationa See the attached detailed Office action for a 	priority documents have been all Bureau (PCT Rule 17.2(a)).	received in this National Stage
14) Acknowledgment is made of a claim for don	•	
 a) The translation of the foreign language 15) Acknowledgment is made of a claim for dor Attachment(s) 	e provisional application has be	een received.
	🗖	
 Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449) Paper No. 	3) 5) Notice of In	iummary (PTO-413) Paper No(s) nformal Patent Application (PTO-152)
5. Patent and Trademark Office TO-326 (Rev. 04-01) Office	ce Action Summary	Part of Paper No. 21

Application/Control Number: 09/347,311

Art Unit: 1633

Response to amendment

1. The Examiner of your application in the PTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Examiner Eleanor Sorbello Group Art Unit 1633.

- 2. Applicant's amendment and response to the official Office Action mailed 6/21/01, as Paper No. 18, has been received and filed on 11/26/01 as Paper No. 20D. Claims 1,3,7,10, 11, 20 have been amended, and claim 92 has been added. Claims 1-15, 17-21, 23, 24, 38-45, 47-48, 92 are pending. Applicant's amendments and arguments have been thoroughly reviewed, but are persuasive only to a point for the reasons that follow. Any rejections not reiterated in this action have been withdrawn as being obviated by the amendment of the claims and/or applicant's argument.
- 3. Applicant's arguments are addressed below on a per section basis.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. <u>Claims 1-15, 17-21, 23, 24, 38-45, 47, 48 remain rejected</u> as stated in office action dated 6/21/01, and <u>claim 92 is rejected</u> under 35 USC § 112, first paragraph, because the specification, while being enabling for the use of plasmid vectors that initiate transcription of double stranded RNA introduced into C.elegans, does not

Page 2

Application/Control Number: 09/347,311

Art Unit: 1633

reasonably provide enablement for all other limitations encompassed by the claims.

The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims.

Applicant's arguments have been fully considered but they are not persuasive.

Applicants argue that they have amended the claims to nematodes and that one of skill in the art will not require undue experimentation to practice the claimed invention. However the examiner argues that the claim still encompasses any and all multicellular organisms for which applicants are not enabled for in vivo applications.

Applicants argue that the specification teaches vectors that initiate transcription of a cDNA or DNA to double stranded RNA and therefore should be enabled for any vector system. However, examiner argues that the claims are not limited to nematodes and the transcription of RNA, but the claims encompass DNA delivery, transcription and expression in any multicellular organism for which applicants are not enabled.

Applicants argue that the examiners statement regarding the fact that the mechanism of RNA interference was not known and unpredictable at the time of filing of the instant application, (because the reason why dsRNA had greatly enhanced interference as compared to ssRNA was not known), but which was not relevant to that which is claimed. Examiner agrees.

Regarding the generation of cDNA libraries applicants argue that it is routine in the art and that the vector chosen is a matter of choice. Examiner agrees. However it is not clear to the examiner how an entire cDNA library representing all the genes that

encode proteins in C. elegans is to be introduced into one (or more) nematode cells, as claimed in claim 1 (b), so as to be able to identify only one phenotype.

Therefore in view of the nature of the invention, state of the art, breadth of the claims and guidance in the specification one of skill in the art will require undue experimentation to make and use the invention as claimed.

Conclusion

- 6. Claims 1-15, 17-21, 23, 24, 38-45, 47, 48, 92 are rejected.
- 7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Art Unit: 1633

8. Any inquiry concerning this communication should be directed to Eleanor

Sorbello, who can be reached at (703)-308-6043. The examiner can normally be

reached on Mondays-Fridays from 6.30 a.m. to 3.00 p.m. EST.

Questions of formal matters can be directed to the patent analyst,

Tracey Johnson, whose telephone number is (703) 305-2982.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Deborah Clark, can be reached on (703) 305-4051. The fax phone number

for the organization where this application or proceeding is assigned is (703) 308-4242.

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the receptionist whose telephone number is (703) 308-0196.

If the claims are amended canceled and/or added the applicants are required to

follow Amendment Practice under 37 CFR § 1.121 (http://www.uspto.gov) and A

CLEAN COPY OF ALL PENDING CLAIMS IS REQUESTED to facilitate further

examination.

SCOTT D. PRIEBE, PH.D PRIMARY EXAMINER